

REMARKS

Claims 1-16, 18-23, 25-37, 39-47, and 49 are pending but stand rejected. Claims 17, 24, 38, and 48 have been cancelled. Claims 1, 3, 6, 9, 10, 12-15, 18-23, 25-28, 30-37, 39-47, and 49 have been amended. Each independent Claim, as amended, recites that the pattern formed on the side of the media stack includes a plurality of sub-patterns. Each sub-pattern is formed on a different subset of sheets in the media stack. This amendment finds support in paragraphs 18-20, 35, and 42 of the specification. In light of the amendments and the following remarks, the Applicant respectfully requests that the Examiner withdraw the rejection and pass the application on to issuance.

Claim Rejections – 35 USC §102: The Examiner rejected Claims 1-8 as being anticipated by DE 3219784 to Kusuda.

Claim 1 is directed to an apparatus that includes the following:

1. a tray for holding a media stack, the media stack having opposing faces joined by sides, a pattern being formed on at least one of the sides, each face being a face of a media sheet, the pattern including a plurality of sub-patterns, each sub-pattern being formed on a different subset of sheets in the media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset;
2. a sensor;
3. a transport mechanism to move the tray past the sensor to scan the sub-patterns; and
4. control logic operable to communicate with the sensor to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack.

Kusuda describes moving a cassette (12) passed a sensor (15). The cassette (12) includes a mark (16) on its side. The scanner (15) reads the mark (16) as the cassette (12) is moved passed the sensor (15). Kasuma mentions nothing of a pattern formed on side of a media stack, a pattern that includes a plurality of sub-patterns each formed on a different subset of sheets in the media stack, a pattern that encodes imaging data identifying an expected number of sheets, or control logic operable to communicate with the sensor to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack.

For at least this reason Claim 1 and Claim 2 which depends from Claim 1 are patentable over Kasuda.

Claim 3 is directed to a media source that includes the following:

1. a tray for holding a media stack, the media stack having opposing faces joined by sides, a pattern being formed on at least one of the sides, each face being a face of a media sheet, the pattern including a plurality of sub-patterns, each sub-pattern being formed on a different subset of sheets in the media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset;
2. a transport mechanism operable to move the tray between a first position in which the media stack can be loaded onto the tray and a second position in which a sheet from the media stack loaded onto the tray can be fed into a print path of an imaging device;
3. a sensor positioned so that it can scan the sub-patterns as the transport mechanism moves the tray between the first and second positions; and
4. control logic operable to communicate with the sensor to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack.

As with Claim 1, Kasuda mentions nothing of a pattern formed on side of a media stack, a pattern that includes a plurality of sub-patterns each formed on a different subset of sheets in the media stack, a pattern that encodes imaging data identifying an expected number of sheets, or control logic operable to communicate with the sensor to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack. For at least this reason Claim 3 and Claims 4 and 5 which depend from Claim 3 are patentable over Kasuda.

Claim 6 is directed to a media source that includes the following:

1. a tray for holding a media stack, the media stack having opposing faces joined by sides, a pattern being formed on at least one of the sides, each face being a face of a media sheet, the pattern including a plurality of sub-patterns, each sub-pattern being formed on a different subset of sheets in the media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset;
2. means for moving the tray between a first position and a second position;
3. means for scanning the sub-patterns as the tray is moved between the first position and the second position; and
4. a means for deciphering the imaging data from the sub-patterns for each subset of sheets in the media stack.

As with Claim 1, Kasuda mentions nothing of a pattern formed on side of a media stack, a pattern that includes a plurality of sub-patterns each formed on a different subset of sheets in the media stack, a pattern that encodes imaging data identifying an expected number of sheets, or a means for deciphering the imaging data from the sub-

patterns for each subset of sheets in the media stack. For at least this reason Claim 6 and Claims 7 and 8 which depend from Claim 6 are patentable over Kasuda.

Claim Rejections – 35 USC §103: The Examiner rejected Claims 9-25 and 28-49 as being unpatentable over Kasuda in view of USPN 6,335,084 issued to Biegelsen.

Claim 9 is directed to a data identification system and recites the following:

1. a tray for holding a media stack, the media stack the media stack having opposing faces joined by sides, a pattern being formed on at least one of the sides, each face being a face of a media sheet, the pattern including a plurality of sub-patterns, each sub-pattern being formed on a different subset of sheets in the media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset;
2. a transport mechanism operable to move the tray between a first position and a second position;
3. a sensor positioned to scan the sub-patterns as the transport mechanism moves the tray between the first position and the second position; and
4. logic coupled to the sensor and operable to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack.

Biegelsen discusses a pattern (20) formed on a side of each sheet (10) in a media stack (10). See Biegelsen Figs. 1, 6, and 7. Biegelsen pattern (20) simply identifies a media type for the sheet on which it appears. See Biegelsen, col. 4, lines 54-67. Biegelsen's pattern (20) does not correspond to imaging data that identifies an expected number of sheets in a subset of sheets on which the pattern is formed. Kasuda mentions nothing of a pattern formed on side of a media stack, a pattern that

includes a plurality of sub-patterns each formed on a different subset of sheets in the media stack, a pattern that encodes imaging data identifying an expected number of sheets, or a means for deciphering the imaging data from the sub-patterns for each subset of sheets in the media stack.

For at least this reason, Claim 9 and Claims 1016, and 18 which depend from Claim 9 are patentable over Kasuda and Biegelsen.

Claim 19 is directed to an imaging device and recites the following:

1. a print engine operable to form an image on a sheet of media;
2. a media source operable to supply a media stack, the media source including:
 - a. a tray for holding the media stack, the media stack having opposing faces joined by sides, a pattern being formed on at least one of the sides, each face being a face of a media sheet, the pattern including a plurality of sub-patterns, each sub-pattern being formed on a different subset of sheets in the media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset;
 - b. a transport mechanism operable to move the tray between a first position and a second position;
 - c. a sensor positioned to scan the sub-patterns as the transport mechanism moves the tray between the first position and the second position;
3. a transfer mechanism operable to transfer sheets of media from the media source to the print engine;
4. control logic in communication with the media source, the print engine, and the transfer mechanism, the control logic operable to decipher the

imaging data from the sub-patterns for each subset of sheets in the media stack and to control the the operation of the print engine with respect to each subset of sheets according to the imaging data for that subset of sheets.

As with Claim 9, Biegelsen's pattern (20) does not correspond to imaging data that identifies an expected number of sheets in a subset of sheets on which the pattern is formed. Kasuda mentions nothing of a pattern formed on side of a media stack, a pattern that includes a plurality of sub-patterns each formed on a different subset of sheets in the media stack, a pattern that encodes imaging data identifying an expected number of sheets, or a means for deciphering the imaging data from the sub-patterns for each subset of sheets in the media stack.

For at least this reason, Claim 19 and Claims 20-25 which depend from Claim 19 are patentable over Kasuda and Biegelsen.

Claim 28 is directed to a method and recites the following:

1. providing a tray for holding a media, the tray being moveable between a first position and a second position, the media stack having opposing faces joined by sides, a pattern being formed on at least one of the sides, each face being a face of a media sheet, the pattern including a plurality of sub-patterns, each sub-pattern being formed on a different subset of sheets in the media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset;
2. moving the tray between the first position and the second position;
3. scanning the sub-patterns as the tray is moved between the first position and the second position; and

4. deciphering the imaging data from the sub-patterns for each subset of sheets in the media stack.

As with Claim 9, Biegelsen's pattern (20) does not correspond to imaging data that identifies an expected number of sheets in a subset of sheets on which the pattern is formed. Kasuda mentions nothing of a pattern formed on side of a media stack, a pattern that includes a plurality of sub-patterns each formed on a different subset of sheets in the media stack, a pattern that encodes imaging data identifying an expected number of sheets, or a means for deciphering the imaging data from the sub-patterns for each subset of sheets in the media stack.

For at least this reason, Claim 28 and Claims 29-37 and 39 which depend from Claim 28 are patentable over Kasuda and Biegelsen.

Claim 40 is directed to a computer readable medium having instructions for implementing the method of Claim 28. for at least the same reasons Claim 28 is patentable over Rombult, so are Claim 40 and Claims 41-47 and 49 which depend from Claim 40

Claim Rejections – 35 USC §103: The Examiner rejected Claims 26 and 27 and being unpatentable over JP 05-294483A in view of Biegelsen.

Claim 26 is directed to an imaging device and recites the following:

1. a print engine operable to form an image on a sheet of media;
2. a first media source operable to supply a first media stack, the first media source including:
 - a. a first tray for holding the first media stack, the first media stack having opposing faces joined by sides, a first pattern being formed on at least one of the sides, each face being a face of a media sheet, the first pattern including a plurality of first sub-patterns,

- each first sub-pattern being formed on a different subset of sheets in the first media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the first sub-pattern is formed, the imaging data for at least one subset of sheets in the first media stack identifying an expected number of sheets in that subset;
- b. a first transport mechanism operable to move the first tray between a first position and a second position;
 - c. a first sensor positioned to scan the first sub-patterns as the first transport mechanism moves the first tray between the first position and the second position;
3. a second media source operable to supply a second media stack, the second media source including:
- a. a second tray for holding the second media stack, the second media stack having opposing faces joined by sides, a second pattern being formed on at least one of the sides, each face being a face of a media sheet, the second pattern including a plurality of second sub-patterns, each second sub-pattern being formed on a different subset of sheets in the second media stack and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the second sub-pattern is formed, the imaging data for at least one subset of sheets in the second media stack identifying an expected number of sheets in that subset;
 - b. a second transport mechanism operable to move the second tray between a third position and a fourth position;
 - c. a second sensor positioned to scan the second sub-patterns as the second transport mechanism moves the second tray between the third position and the fourth-positions;
4. a transfer mechanism operable to transfer sheets of media from the first

- and second media sources to the print engine;
5. control logic in communication with the first and second media sources, the print engine, and the transfer mechanism, the control logic operable to decipher the first and second sub-patterns to identify imaging data for each of the first subsets of sheets in the first media stack and second media data for each of the second subsets of sheets in the second media stack and to control the operation of the transfer mechanism and to control the operation of the print engine so that the first imaging data for a given one of the subsets of sheets in the first media stack is used when a media sheet from that given subset of sheets from the first media stack is transferred from the first media source and the second imaging data for a given one of the subsets of sheets in the second media stack is used when a media sheet from that given subset of sheets from the second media stack is transferred from the second media source.

The Examiner admits that Morita fails to teach media stacks having sides patterns encoding any type of information. Biegelsen's pattern (20) does not correspond to imaging data that identifies an expected number of sheets in a subset of sheets on which the pattern is formed. For at least these reasons, Claim 26 and Claim 27 which depends from Claim 26 are patentable over Morita and Biegelsen.

Conclusion: In view of the foregoing remarks, the Applicant respectfully submits that the pending claims are in condition for allowance. Consequently, early and favorable action allowing these claims and passing the application to issue is earnestly solicited. The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,
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